

Final NPDES General Permit for Discharge from New and Existing Sources in the Offshore Subcategory of the Oil and Gas Extraction Category for the Territorial Seas of Louisiana (LAG260000)

Agency: United States Environmental Protection Agency

Action: Final Issuance of NPDES General Permit

Summary: Region 6 of the United States Environmental Protection Agency (EPA) today issues a National Pollutant Discharge Elimination System (NPDES) General Permit for the Oil and Gas Extraction Point Source Category, in the Territorial Seas of Louisiana. The permit authorizes discharges from New Sources and Existing Sources in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR Part 435, Subpart A) located in and discharging pollutants to the territorial seas of Louisiana. The discharge of produced water to the Territorial Seas of Louisiana from Offshore Subcategory facilities located in the Outer Continental Shelf (OCS) waters off Louisiana is also covered by this permit.

DATES: All limits and monitoring requirements except the water quality based limits and monitoring for toxicity, benzene, lead, total phenols, and thallium shall become effective thirty days after the publication of this permit in the Federal Register. The water quality based limits and monitoring shall become effective six months after that publication.

FOR FURTHER INFORMATION CONTACT: Ms. Wilma Turner, EPA Region 6, 1445

Ross Avenue, Dallas, Texas 75202, Telephone: (214) 665 7516.

SUPPLEMENTARY INFORMATION:

Regulated Entities. Entities potentially regulated by this action are those which operate offshore oil and gas extraction facilities located in the territorial seas offshore of Louisiana.

<u>Category</u>	<u>Examples of regulated entities</u>
Industry	Offshore Oil and Gas Extraction Platforms

This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your [facility, company, business, organization, etc.] is regulated by this action, you should carefully examine the applicability criteria in Part I. Section A.1. of the general permit. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding "FOR FURTHER INFORMATION CONTACT" section.

Pursuant to section 402 of the Clean Water Act (CWA), 33 U.S.C. section 1342, EPA proposed and solicited public comment on NPDES General Permit LAG260000 at 61 FR 37746 (July 19, 1996). This permit was proposed to address national effluent limitations guidelines promulgated March 4, 1993 and to reissue the general permit covering facilities located in the territorial seas off the State of Louisiana which expired June 30, 1984. Notice of this proposed permit was also

published in the New Orleans Times Picayune on July 27, 1996. The comment period closed on September 17, 1996.

Region 6 received comments from the Offshore Operators Committee, American Petroleum Institute, Louisiana Department of Environmental Quality, Willie R. Taylor - United States Department of Interior, Abraham E. Haspel - United States Department of Energy, Flores & Rucks, Inc., Exxon Company, U.S.A., and the Louisiana Mid-Continent Oil and Gas Association.

EPA Region 6 has considered all comments received. In some instances minor wording changes were made in the final permit in order to clarify some points as a result of comments or to correct typographical errors. In response to the comments received on the proposed permit, the following substantive changes were made in the final permit. Language showing that new sources are covered was added. The critical dilution tables for toxicity limitations were recalculated and expanded to account for additional discharge rates and pipe diameters. Equations were added in place of the tables for determining the limitations for benzene, lead, phenols, and thallium. A period of six months was given to come into compliance with the water quality based limits for produced water. Model input parameters for diffuser modeling were updated based on site specific data. The table specifying vertical separation between discharge ports has been updated to account for greater volume discharges. Produced water discharges are prohibited in some instances in accordance with State regulations (LAC 33:IX.708.C.2.c.iii, iv, and v.). Biochemical oxygen demand and total suspended solids limitations and monitoring were added for sanitary waste water discharges under 2,500 gallons per day, and chlorine limitations were added for

sanitary waste water discharges from platforms which are manned by nine or fewer persons. 24-hour reporting requirements and unauthorized discharge requirements were changed to reflect State regulations. The permit requires operators to submit notification of intent to be covered and discharge monitoring reports to the State instead of EPA. The State's field designation is also required to be included in notifications of intent to be covered. The permit also no longer requires permittees to apply for the reissued permit six months prior to the expiration date.

A copy of the Response to Comments may be obtained from Wilma Turner at the address listed above.

OTHER LEGAL REQUIREMENTS:

Oil Spill Requirements. CWA section 311 prohibits the discharge of oil and hazardous materials in harmful quantities. Discharges in compliance with NPDES permit limits are excluded from this prohibition, but the final permit neither precludes enforcement action for violations of CWA section 311 nor relieves permittees from any responsibilities, liabilities, or penalties for other unauthorized discharges of oil or hazardous materials subject to CWA section 311.

Endangered Species Act. As explained at 61 FR 37746, EPA has found that issuance of the General Permit for the territorial seas off Louisiana will not adversely affect any listed threatened or endangered species or designated critical habitat and requested written concurrence on that determination from the Department of Interior, Fish and Wildlife Service. The Fish and Wildlife

Service and National Marine Fisheries Service provided such concurrence on the proposed General Permit for Discharges from the Offshore Subcategory of the Oil and Gas Extraction Point Source Category to the Territorial Seas of Louisiana (LAG260000).

Ocean Discharge Criteria Evaluation. At 61 FR 37746 EPA Region 6 determined that discharges in compliance with the proposed general permit for the territorial seas of Louisiana (LAG260000) would not cause unreasonable degradation of the marine environment. No comments have been received which disagree with that determination.

Environmental Impact Statement. EPA determined that issuance of the NPDES General Permit for Discharges from the Offshore subcategory of the Oil and Gas Extraction Category to the Territorial Seas of Louisiana was a major Federal action significantly affecting the quality of the human environment. Thus, pursuant to the National Environmental Policy Act of 1969 (NEPA) evaluation of the potential environmental consequences of the permit action in the form of an Environmental Impact Statement (EIS) was required.

On February 12, 1993, the U.S. Environmental Protection Agency (EPA), Region 6, published a Notice of Intent in the Federal Register, to prepare an Environmental Impact Statement (EIS) on its proposed New Source NPDES General Permit for the Offshore Subcategory of the Oil & Gas Extraction Category to the Territorial Seas of the Gulf of Mexico off Texas and Louisiana. The 45-day public review and comment period ended on March 16, 1994. A public hearing to receive comments on the Draft EIS and NPDES permit was held March 16, 1994.

Although the Draft EIS evaluated the NPDES general permits for oil and gas operations in the Territorial Seas of Texas and Louisiana, EPA has not proposed a permit for the Territorial Seas of Texas; therefore, the Final EIS only covers the Louisiana NPDES general permit. The Draft EIS and Final EIS have been completed. EPA considered all information gathered during the NEPA review including the impact analysis, comments received on the Draft EIS and Final EIS, input received from the scoping meeting and public hearing on the draft EIS, and other information provided by interested parties during the EIS process. Additionally, to address impacts relative to Federal and State statutes, programs, and regulations, consultation was undertaken with the Advisory Council on Historic Preservation, the U.S. Fish and Wildlife Service, and the Louisiana Department of Environmental Resources. Through this process EPA found no predicted unacceptable or potentially significant adverse impacts, individually or cumulatively, that were not subject to control through regulation or mitigation. The record of Decision for that process was prepared and is planned to be publicly noticed along with this final permit. Based on that Record of Decision, EPA is issuing the General Permit for Discharges from the Offshore Subcategory of the Oil and Gas Extraction Point Source Category to the Territorial Seas of Louisiana.

Coastal Zone Management Act. The Region found the proposed general permit consistent with Louisiana's approved Coastal Zone Management Plan and submitted that determination and a copy of the proposed permit to the Coastal Management Division of the Louisiana Department of Natural Resources for certification. The Department of Natural Resources provided such certification on August 22, 1996.

Marine Protection and Sanctuaries Act.

The Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 regulates the dumping of all types of materials into ocean waters and establishes a permit program for ocean dumping. In addition the MPRSA establishes Marine Sanctuaries Program, implemented by the National Oceanographic and Atmospheric Administration (NOAA), which requires NOAA to designate ocean waters as marine sanctuaries for the purpose of preserving or restoring their conservation, recreational, ecological or aesthetic values. No marine sanctuaries designated under the Marine Research and Sanctuaries Act exist in the area to which this permit applies.

State Water Quality Certification. Under section 401(a)(1) of the Act, EPA may not issue an NPDES permit until the State in which the discharge will originate grants or waives certification to ensure compliance with appropriate requirements of the Act and State law. Section 301(b)(1)(C) of the Act requires that NPDES permits contain conditions that ensure compliance with applicable state water quality standards or limitations. The proposed permit contains limitations intended to ensure compliance with state water quality standards and has been determined by EPA Region 6 to be consistent with Louisiana's water quality standards and the corresponding implementation plan. The Region solicited certification of the permit from the Louisiana Department of Environmental Quality at the time it was proposed.

On September 25, 1996 the State submitted a conditional letter certifying that discharges in accordance with the permit will not violate water quality standards. That certification was modified with a letter the State submitted on September 19, 1997. The four conditions of

certification LDEQ included in those letters are:

1. the discharge of produced water onto any intermittently exposed sediment surface is prohibited (LAC33:IX.708.C.2.c.iii).
2. Produced water shall not be discharged within the boundaries of any State or Federal wildlife management area, refuge or park or into any water body determined by the Water Pollution Control Division to be of special ecological significance (LAC 33:IX.708.C.2.c.iv).
3. Produced water shall not be discharged within 1,300 feet (via water) of an active oyster lease, live natural oyster or other molluscan reef, designated oyster seed bed, or sea grass bed. No produced water shall be discharged in a manner that, at any time, facilitates the incorporation of significant quantities of hydrocarbons or radio nuclides into sediment or biota (LAC 33:IX.708.C.2.c.v).
4. Sanitary waste discharges with an average daily flow of less than 2,500 gallons per day shall not exceed a weekly average of 45 mg/l for a five day biochemical oxygen demand and for total suspended solids (LAC 33:IX.709.B & LAC 33:IX.711.C).

Those changes have been incorporated in the final permit as required.

Executive Order 12866. The Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12291 pursuant to Section 8(b) of that order. Guidance on Executive Order 12866 contain the same exemptions on OMB review as existed under Executive Order 12291. In fact, however, EPA prepared a regulatory impact analysis in connection with its promulgation of the guidelines on which a number of the permit's provisions are based and submitted it to OMB for review. See 58 FR 12494, March 4, 1993).

Paperwork Reduction Act. The information collection required by this permit has been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., in submission made for the NPDES permit program and assigned OMB control numbers 2040-0086 (NPDES permit application) and 2040-0004 (discharge monitoring reports).

Since this permit is very similar in reporting and application requirements and in discharges which are required to be monitored as the Western Gulf of Mexico Outer Continental Shelf (OCS) general permit (GMG290000) the paperwork burdens are expected to be nearly identical. When it issued the OCS general permit, EPA estimated it would take an affected facility three hours to prepare the request for coverage and 38 hours per year to prepare discharge monitoring reports. It is estimated that the time required to prepare the request for coverage and discharge monitoring reports for this permit will be the same.

Regulatory Flexibility Act The Regulatory Flexibility Act, 5 U.S.C. 601 et seq., requires that

EPA prepare a regulatory flexibility analysis for regulations that have a significant impact on a substantial number of small entities. As indicated below, the permit issued today is not a “rule” subject to the Regulatory Flexibility Act . EPA prepared a regulatory flexibility analysis, however, on the promulgation of the Offshore Subcategory guidelines on which many of the permit’s effluent limitations are based. That analysis shows that issuance of this permit will not have a significant impact on a substantial number of small entities.

Unfunded Mandates Reform Act Section 201 of the Unfunded Mandates Reform Act (UMRA), P.L. 104-4, generally requires Federal agencies to assess the effects of their “regulatory actions” on State, local, and tribal governments and the private sector. UMRA uses the term “regulatory actions” to refer to regulations. (See, e.g., UMRA section 201, “Each agency shall . . . assess the effects of Federal regulatory actions . . . (other than to the extent that such regulations incorporate requirements specifically set forth in law)” (emphasis added)). UMRA section 102 defines “regulation” by reference to section 658 of Title 2 of the U.S. Code, which in turn defines “regulation” and “rule” by reference to section 601(2) of the Regulatory Flexibility Act (RFA). That section of the RFA defines “rule” as “any rule for which the agency publishes a notice of proposed rulemaking pursuant to section 553(b) of [the Administrative Procedure Act (APA)], or any other law. . .”

NPDES general permits are not “rules” under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits are also not subject to such a requirement under the CWA. While EPA publishes a notice to solicit public

comment on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide “an opportunity for a hearing.” Thus, NPDES general permits are not “rules” for RFA or UMRA purposes.

EPA has determined that the final permit would not contain a Federal requirement that may result in expenditures of \$100 million or more for State, local and tribal governments, in the aggregate, or the private sector in any one year.

The Agency also believes that the permit would not significantly nor uniquely affect small governments. For UMRA purposes, “small governments” is defined by reference to the definition of “small governmental jurisdiction” under the RFA. (See UMRA section 102(1), referencing 2 U.S.C. 658, which references section 601(5) of the RFA.) “Small governmental jurisdiction” means governments of cities, counties, towns, etc., with a population of less than 50,000, unless the agency establishes an alternative definition.

The final permit also would not uniquely affect small governments because compliance with the proposed permit conditions affects small governments in the same manner as any other entities seeking coverage under the permit.

NPDES Permit LAG260000 is hereby issued as it appears below.

Authorization To Discharge Under

the National Pollutant Discharge Elimination System

In compliance with the Clean Water Act, as amended (33 U.S.C. 1251 et. seq., the "Act"), operators of New Sources and existing sources in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category which are located in lease blocks in the territorial seas of Louisiana are authorized to discharge to the territorial seas of Louisiana in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof. Also, operators of New Sources and existing sources in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category which are located in lease blocks in the Outer Continental Shelf off Louisiana are authorized to discharge produced water from those lease blocks to the territorial seas of Louisiana in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

Operators of lease blocks discharging within the area covered by this general permit must submit written notification to the Director that they intend to be covered (See Part I.A.2). Unless otherwise notified in writing by the Director after submission of the notification, owners or operators requesting coverage are authorized to discharge under this general permit. Operators of lease blocks discharging within the general permit area who fail to notify the Director of intent to be covered by this general permit are not authorized under this general permit to discharge pollutants from those facilities.

Facilities which adversely affect properties listed or eligible for listing in the National

Register of Historic Places are also not authorized to discharge under this permit.

This permit shall become effective at Midnight Central Daylight Savings Time [_____
December 4, 1997_____].

This permit and the authorization to discharge shall expire at midnight, Central Daylight
Savings Time, [December 3, 2002]

Signed this [] day of [].

William B. Hathaway

Director, Water Quality Protection Division

EPA Region 6

PART I. REQUIREMENTS FOR NPDES PERMITS

Section A. Permit Applicability and Coverage Conditions

1. Operations Covered

This permit establishes effluent limitations, prohibitions, reporting requirements, and other conditions on discharges from oil and gas facilities engaged in production, field exploration, developmental drilling, well completion, and well treatment operations.

The permit coverage area consists of New Source and existing source discharges in lease blocks located in the territorial seas of Louisiana, which discharge to the territorial seas of Louisiana. In addition, permit coverage consists of discharges of produced water from lease blocks in the Outer Continental Shelf offshore of Louisiana which are made to the territorial seas of Louisiana. This permit does not authorize discharges from facilities defined as "coastal", "onshore", or "stripper" (see 40 CFR Part 435, Subparts C, D, and E).

2. Notification Requirements

Written notification of intent to be covered including the legal name and address of the operator, the lease block number assigned by the state or the Department of Interior or, if none, the name commonly assigned to the lease area, and the number and type of facilities located within the lease block shall be submitted at least fourteen days prior to the commencement of discharge. New Source facilities shall be clearly identified as such in the notification. Operators discharging within the area of coverage of this permit prior to permit issuance shall submit notification of intent to be covered within 30 days after such issuance. If an application for an individual NPDES permit has been previously submitted for the lease, the notification shall include the application/permit number or the permit number of any individual NPDES permit

issued by EPA Region 6 for this activity.

All notifications of intent to be covered and any subsequent reports under this permit shall be sent to the following address:

Louisiana Department of Environmental Quality
Office of Water Resources
Attn: Oil and Gas Permits Unit
7290 Bluebonnet
P.O. Box 82215
Baton Rouge, Louisiana 70884-2215

3. Termination of Operations

Lease block operators shall notify the Director within 60 days after the permanent termination of discharges from their facilities within the lease block.

4. Application for NPDES Individual Permit

- a. Any operator authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The operator shall submit an application together with the reasons supporting the request to the Director.
- b. When an individual NPDES permit is issued to an operator otherwise subject to

this general permit, the applicability of this permit to the owner or operator is automatically terminated on the effective date of the individual permit.

Section B. Effluent Limitations and Monitoring Requirements

1. Drilling Fluids and Drill Cuttings

There shall be no discharge of drilling fluids or drill cuttings.

2. Deck Drainage

a) Limitations

Free Oil. No free oil shall be discharged, as determined by the visual sheen method on the surface of the receiving water. Monitoring shall be performed once per day when discharging, during conditions when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the facility is manned. The number of days a sheen is observed must be recorded.

3. Produced Water

a) Limitations

Oil and Grease. Produced water discharges must meet both a daily maximum of 42 mg/l and a monthly average of 29 mg/l for oil and grease. The sample type shall be either grab, or a 24-hour composite which consists of the arithmetic average of the results of 4 grab samples taken over a 24-hour period. If only one sample is taken for any one month, it must meet both the daily and monthly limits. Samples shall be collected prior to the addition of any seawater to the produced water waste stream. The analytical method is that specified at 40 CFR Part 136.

Benzene, Lead, Thallium, and Total Phenol. Produced water discharges must meet the limits for benzene, lead, thallium, and total phenol calculated using the following equations and the produced water critical dilution shown in Appendix A, Table 1 of this permit.

Benzene

$$\text{Daily Max.} = (220.8 \text{ ug/l} / \text{Critical Dilution}) * 100$$

$$\text{Monthly Avg.} = (93 \text{ ug/l} / \text{Critical Dilution}) * 100$$

Total Lead

$$\text{Daily Max.} = (36.7 \text{ ug/l} / \text{Critical Dilution}) * 100$$

$$\text{Monthly Avg.} = (15.5 \text{ ug/l} / \text{Critical Dilution}) * 100$$

Total Thallium

$$\text{Daily Max.} = (19.6 \text{ ug/l} / \text{Critical Dilution}) * 100$$

$$\text{Monthly Avg.} = (8.3 \text{ ug/l} / \text{Critical Dilution}) * 100$$

Total Phenol

$$\text{Daily Max.} = (478 \text{ ug/l} / \text{Critical Dilution}) * 100$$

$$\text{Monthly Avg.} = (201 \text{ ug/l} / \text{Critical Dilution}) * 100$$

These limits and the associated monitoring requirements for benzene, total lead, total thallium, and total phenol shall become effective six months after the effective date of the permit.

The flow used to determine the critical dilution from the table shall be the flow most recently reported on the discharge monitoring report for the facility.

Facilities which have not previously reported produced water flow on the discharge monitoring report shall use the most recent monthly average flow. The depth used to determine the limits shall be the difference in water depth between the discharge pipe and the sea floor or between the water's surface and the seafloor if the produced water is discharged above the surface. The sample type shall be grab. The analytical method is that specified at 40 CFR Part 136. When seawater is added to the produced water waste stream prior to discharge, the total produced water flow, including the added seawater, shall be used in determining the critical dilution from Appendix A, Table 1. Limitations for benzene, total lead, total phenol, and total thallium shall become effective six months after the effective date

of this permit.

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

Total Phenol (4AAP Method)	5 $\mu\text{g}/\ell$
Thallium (Total)	10 $\mu\text{g}/\ell$
Lead (Total)	5 $\mu\text{g}/\ell$
Benzene	10 $\mu\text{g}/\ell$

Toxicity. Produced water discharges must show no observed effect for the survival endpoint portion of the tests on a 7-day average minimum and monthly average minimum basis as measured by the 7-day chronic toxicity test. The No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Appendix A, Table 1 of this permit. Critical dilution shall be determined using Table 1 of this permit and is based on the discharge rate most recently reported on the discharge monitoring report and the water depth between the discharge pipe and the seafloor or between the surface and the seafloor if the discharge is made above the water's surface. Facilities which have not previously reported produced water flow on the discharge monitoring report shall use the most recent monthly average flow for determining the critical dilution from Table 1 of this permit. The monthly average minimum NOEC value is defined as the arithmetic average of all 7-day average NOEC

values determined during the month. These limits and the associated monitoring requirements for toxicity shall become effective six months after the effective date of the permit

Methods to Increase Dilution for Compliance with Limits for Toxicity and Benzene,

Lead, thallium, and Phenol. Permittees wishing to increase mixing may use a horizontal diffuser, multiple port discharges, or add seawater as follows:

Permittees using a horizontal diffuser shall install the diffuser designed using CORMIX2. Both the numeric water quality-based limits and the critical dilution for chronic toxicity testing shall be based on the modeled dilution for the diffuser. The following input parameters shall be used in modeling the critical dilution:

Density Gradient = 0.182 sigma-t/m

Ambient seawater density at diffuser depth = 1017 kg/m³

Produced water density = 1070 kg/m³

Current speed = 10 cm/sec.

When the water at the discharge site is of sufficient depth that the plume does not impinge the bottom, the Brooks equation shall be applied to the CORMIX2 results as follows:

- 1 Calculate the near field dilution factor (S) at the end of the impingement region, collapsed plume width (H), and downstream distance where the impingement region ends (x) using the CORMIX2 model.
- 2 Using the input conditions cited above and calculated factors from Step 1, above, calculate the far field dilution factor, C_i/C , using the Brooks equation:

$$\frac{C_i}{C} = \left(\operatorname{erf} \left[\left(\frac{1.5}{\left(1 + 8AH^{\frac{4}{3}} \frac{t}{H^2} \right)^3 - 1} \right)^{\frac{1}{2}} \right] \right)^{-1}$$

where:

C_i = concentration at end of impingement

C = concentration at edge of 100 m mixing zone

H = collapsed plume width, in meters

A = 4/3 power law dispersion parameter

= 0.000453 m^{2/3}/sec

u = current speed

x = downstream distance where impingement region ends (from step 1, above)

t = travel time from end of impingement to 100 m,

= (100m - x)/u

erf = the error function

- 3 The total dilution at the 100 m mixing zone is defined as the product of the near-field dilution factor, S, found in step 1 and the far-field dilution factor, C_i/C , calculated in Step 2.

Permittees shall state the calculated critical dilution corresponding to that diffuser

on the annual Discharge Monitoring Report (DMR) with a certification that the diffuser is installed. The CORMIX2 model runs shall be retained by the permittee as part of its NPDES records.

Permittees using vertically aligned multiple discharge ports shall provide vertical separation between ports which is consistent with Table 2 of this permit. When multiple discharge ports are installed, the depth difference between the discharge port closest to the sea floor and the sea floor shall be the depth difference used to determine the critical dilution from Table 1 of this permit. The critical dilution value shall be based on the port flow rate (total flow rate divided by the number of discharge ports) and based on the diameter of the discharge port (or smallest discharge port if they are of different styles).

When seawater is added to the produced water waste stream prior to discharge, the total produced water flow, including the added seawater, shall be used in determining the critical dilution from Table 1.

b) Prohibitions

The discharge of produced water is prohibited onto any intermittently exposed sediment surface, within the boundaries of any state or Federal wildlife management area, refuge, or park or into any water body determined to be of special ecological significance, within 1,300 feet of an active oyster lease, live

natural oyster or other molluscan reef, designated oyster seed bed, or sea grass bed, or which facilitates the incorporation of significant quantities of hydrocarbons or radio nuclides into sediment or biota.

c) **Monitoring Requirements**

Flow. Once per month, an estimate of the flow in the units of millions of gallons per day (MGD) must be recorded.

Oil and Grease The required frequency of sampling shall be once per month by grab sample.

Benzene, Lead, Phenol, and Thallium. The required frequency of monitoring shall be determined from the limits calculated from Appendix A, Table 1 as follows:

Monthly Avg.		
<u>Parameter</u>	<u>Limit (ug/l)</u>	<u>Frequency</u>
Thallium	> 1,044	Once/Quarter
	≤ 1,044 and > 490	Once/Month
	≤ 490	Once/2 Weeks
Benzene	> 12,600	Once/Quarter
	≤ 12,600 and > 5,900	Once/Month

	24	
	$\leq 5,900$	Once/2 Weeks
Total Lead	$> 65,000$	Once/Quarter
	$\leq 65,000$ and $> 30,600$	Once/Month
	$\leq 30,600$	Once/2 Weeks
Total Phenol	$> 26,400$	Once/Quarter
	$\leq 26,400$ and $> 12,400$	Once/Month
	$\leq 12,400$	Once/2 Weeks

These monitoring requirements for benzene, total lead, total thallium, and total phenol shall become effective six months after the effective date of the permit.

Samples for monitoring these parameters shall be collected after addition of any substances, including seawater that is added prior to discharge.

If the permittee has been compliant with limits for benzene, lead, total phenol or thallium for one full year (twelve consecutive months), the required testing frequency shall be reduced to once per quarter for the parameter or parameters in compliance as long as the discharge remains in compliance.

For permittees required to monitor once per quarter or once per month as stated above,

the monitoring frequency shall increase to once per two weeks for any of these parameters when the discharge has been found to exceed a limit for that parameter.

If the operator adds a diffuser, multiple discharge ports, or seawater to increase dilution to ensure compliance with the limits as described above, the operator may decrease the monitoring frequency to once per quarter after they have taken the action to increase dilution and have demonstrated compliance with the limits for three consecutive months.

Toxicity. The required frequency of toxicity testing shall be determined using the toxicity limits as follows:

<u>Toxicity Limit (Critical Dilution)</u>	<u>Monitoring Frequency</u>
< 1%	once per year
≥ 1 and < 2.25%	once per quarter
$\geq 2.25\%$	once per month

The toxicity monitoring requirements shall become effective six months after the effective date of this permit.

Samples for monitoring produced water toxicity shall be collected after addition of any added substances, including seawater that is added prior to discharge. Samples also shall

be representative of produced water discharges when scale inhibitors, corrosion inhibitors, biocides, paraffin inhibitors, well completion fluids, workover fluids, and/or well treatment fluids are used in operations.

If the permittee has been compliant with this toxicity limit for one continuous year (12 consecutive months), the required testing frequency shall be reduced to once per year.

For permittees required to monitor once per year or once per quarter as stated above, the monitoring frequency shall increase to once per month when the discharge has been found to exceed the limits for toxicity.

If the operator adds a diffuser, multiple discharge ports, or seawater to increase dilution to ensure compliance with the limits as described above, the operator may decrease the monitoring frequency to once per year after they have taken the action to increase dilution and have demonstrated compliance with the limits for three consecutive months.

Radioactivity. Produced water discharges shall be monitored for Radium 226 and Radium 228 (See Part I.D.4). The required frequency of monitoring shall be obtained using the critical dilution from Appendix A, Table 1 based on the water depth, discharge rate, and pipe diameter as also required for the toxicity limits. The required monitoring frequencies are as follows:

<u>Critical Dilution</u>	<u>Monitoring Frequency</u>
< 1%	once per year
≥ 1 and < 2.25%	once per quarter
$\geq 2.25\%$	once per month

When the permittee has monitored radioactivity for one continuous year the required monitoring frequency shall be reduced to once per year.

4. Produced Sand

There shall be no discharge of produced sand.

5. Well Treatment, Completion, and Workover Fluids

a) Limitations

Free Oil. No free oil shall be discharged.

Oil and Grease. Well treatment fluids must meet both a daily maximum of 42 mg/l and a monthly average of 29 mg/l limitation for oil and grease.

Priority Pollutants. For well treatment, completion, and workover fluids the discharge of priority pollutants is prohibited except in trace amounts. Information on the specific

chemical composition of any additives containing priority pollutants shall be recorded.

[Note] If materials added downhole as well treatment, completion, or workover fluids contain no priority pollutants, the discharge is assumed not to contain priority pollutants except possibly in trace amounts.

b) Monitoring Requirements

This discharge shall be considered produced water for monitoring purposes when commingled with produced water.

Free Oil. Monitoring shall be performed using the static sheen test method once per day when discharging and the facility is manned. The number of days a sheen is observed must be recorded.

Oil and Grease. Monitoring shall be performed once per month. The sample type may be either grab or a 24-hour composite consisting of the arithmetic average of the results of 4 grab samples taken within the 24-hour period. If only one sample is taken for any one month, it must meet both the daily and monthly limits. The analytical method is that specified at 40 CFR Part 136.

6. Sanitary Waste

a) Prohibitions

Solids. No floating solids may be discharged. Observations must be made once per day, during daylight in the vicinity of sanitary waste outfalls, following either the morning or midday meals and at the time during maximum estimated discharge.

b) Limitations

Residual Chlorine. Total residual chlorine is a surrogate parameter for fecal coliform. Discharge of total residual chlorine must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded (approved method, Hach CN-66-DPD).

Biochemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS)

Sanitary waste water discharges of less than 2,500 gallons per day shall not exceed a daily maximum and monthly average concentration of 45 mg/l for BOD5 and 45 mg/l for TSS. The monitoring frequency shall be once per six months.

7. Domestic Waste

a) Prohibitions

Solids. No floating solids or foam shall be discharged.

b) Monitoring Requirements

An observation shall be made once per day during daylight in the vicinity of domestic waste outfalls following the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed must be recorded.

8. Miscellaneous Discharges

Desalination Unit Discharge

Diatomaceous Earth Filter Media

Blowout Preventer Fluid

Uncontaminated Ballast Water

Uncontaminated Bilge Water

Mud, Cuttings, and Cement at the Sea floor

Uncontaminated Freshwater

Uncontaminated Seawater

Boiler Blowdown

Source Water and Sand

Excess Cement Slurry

a) Limitations

Free Oil. No free oil shall be discharged. Discharge is limited to those times that a visual sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water once per week when discharging, or the static sheen method at the operator's option. The number of days a sheen is observed must be recorded.

Floating Solids or Visible Foam. There shall be no discharge of floating solids or visible foam.

[Exceptions] Uncontaminated seawater, uncontaminated freshwater, source water and source sand, uncontaminated bilge water, and uncontaminated ballast water may be discharged from platforms that are on automatic purge systems without monitoring for free oil when the facilities are not manned. Additionally, discharges at the sea floor of: muds and cuttings prior to installation of the marine riser, cement, and blowout preventer fluid may be discharged without monitoring with the static sheen test when conditions make observation of a sheen on the surface of the receiving water impossible.

9. Miscellaneous Discharges of Seawater and Freshwater which have been chemically treated.

Excess seawater which permits the continuous operation of fire control and utility lift pumps

Excess seawater from pressure maintenance and secondary recovery projects

Water released during training of personnel in fire protection

Seawater used to pressure test new piping and new pipelines

Ballast water

Once Through Non-contact cooling water

Desalinization unit discharge

a) Limitations

Treatment Chemicals. The concentration of treatment chemicals in discharged seawater or freshwater shall not exceed the most stringent of the following three constraints:

- 1) the maximum concentrations and any other conditions specified in the EPA product registration labeling if the chemical is an EPA registered product
- 2) the maximum manufacturer's recommended concentration
- 3) 500 mg/l

Free Oil. No free oil shall be discharged. Discharge is limited to those times that a visible sheen observation is possible unless the operator uses the static sheen method.

Monitoring shall be performed using the visual sheen method on the surface of the

receiving water once per week when discharging, or by use of the static sheen method at the operator's option. The number of days a sheen is observed must be recorded.

Toxicity. The 48-hour minimum and monthly average minimum No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Table 3 of this permit. Critical dilution shall be determined using Table 3 of this permit and is based on the discharge rate, discharge pipe diameter, and water depth between the discharge pipe and the bottom. The monthly average minimum NOEC value is defined as the arithmetic average of all 48-hour average NOEC values determined during the month.

b) Monitoring Requirements

Flow. Once per month, an estimate of the flow (MGD) must be recorded.

Toxicity. The required frequency of testing for continuous discharges shall be determined as follows:

<u>Discharge Rate</u>	<u>Toxicity Testing Frequency</u>
0 - 499 bbl/day	once per year
500 - 4,599 bbl/day	once per quarter
4,600 bbl/day and above	once per month

Intermittent or batch discharges shall be monitored once per discharge but are required to be monitored no more frequently than the corresponding frequencies shown above for continuous discharges.

Samples shall be collected after addition of any added substances, including seawater that is added prior to discharge, and before the flow is split for multiple discharge ports. Samples also shall be representative of the discharge. Methods to increase dilution previously described for produced water in Part I.B.3.a also apply to seawater and freshwater discharges which have been chemically treated.

If the permittee has been compliant with this toxicity limit for one full year (12 consecutive months) for a continuous discharge of chemically treated seawater or freshwater, the required testing frequency shall be reduced to once per year for that discharge.

Section C. Other Discharge Limitations

1. Halogenated Phenolic Compounds

There shall be no discharge of halogenated phenolic compounds as a part of any waste stream authorized in this permit.

2. Dispersants, Surfactants, and Detergents

The facility operator shall minimize the discharge of dispersants, surfactants, and detergents except as necessary to comply with the safety requirements of the Occupational Safety and Health Administration. This restriction applies to tank cleaning and other operations which do not directly involve the safety of workers.

3. Garbage

The discharge of garbage is prohibited (See Part II.G.30).

5. Area of Biological Concern

There shall be no discharge in Areas of Biological Concern, including marine sanctuaries.

Section D. Other Conditions

1. Samples of Wastes

If requested, the permittee shall provide EPA with a sample of any waste in a manner specified by the Agency.

2. PRODUCED WATER TOXICITY TESTING REQUIREMENTS (7-DAY CHRONIC NOEC MARINE LIMITS)

The approved test methods for permit compliance are identified in 40 CFR Part 136 and published at 60 FR 53528.

- a) The permittee shall utilize the Mysidopsis bahia (Mysid shrimp) chronic static renewal 7-day survival and growth test using Method 1007.0.
- b) The permittee shall utilize the Menidia beryllina (Inland Silverside minnow) chronic static renewal 7-day larval survival and growth test (Method 1006.0).
- c) When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the low-flow effluent concentration (critical dilution), the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in Part I.B.3.c of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.
- d) This permit may be reopened to require chemical specific effluent limits, additional

testing, and/or other appropriate actions to address toxicity.

- e) The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms", EPA/600/4-91/003, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part II.C.3 of this permit. The permittee shall submit full reports only upon the specific request of the Agency.
- f) In accordance with Part II.D.4 of this permit, the permittee shall report on the DMR for the reporting period the lowest Whole Effluent Lethality values determined for either species for the 30-Day Average Minimum and 7-Day Minimum under Parameter No. 22414, and the permittee shall report the results of the valid toxicity test as follows:
 - 1. MENIDIA BERYLLINA (INLAND SILVERSIDE MINNOW)
 - A) If the Inland Silverside minnow No Observed Effect Concentration (NOEC) for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B on the Discharge Monitoring Report.

- B) Report the Inland Silverside minnow NOEC value for survival, Parameter No. TOP6B on the Discharge Monitoring Report.
- C) Report the Inland Silverside minnow NOEC value for growth, Parameter No. TPP6B on the Discharge Monitoring Report.
- D) Report the % coefficient of variation (larger of critical dilution and control), Parameter No. TQP6B on the Discharge Monitoring Report.

2. MYSIDOPSIS BAHIA (MYSID SHRIMP)

- A) If the Mysid shrimp NOEC for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E on the Discharge Monitoring Report.
- B) Report the Mysid shrimp NOEC value for survival, Parameter No. TOP3E on the Discharge Monitoring Report.
- C) Report the Mysid shrimp NOEC value for growth, Parameter No. TPP3E on the Discharge Monitoring Report.

- D) Report the % coefficient of variation (larger of critical dilution and control), Parameter No. TQP3E on the Discharge Monitoring Report.

3. CHEMICALLY TREATED SEAWATER AND FRESHWATER TOXICITY TESTING REQUIREMENTS (48-HOUR ACUTE NOEC MARINE LIMITS)

The approved test methods for permit compliance are identified in 40 CFR Part 136 and published at 60 FR 53528.

- a) The permittee shall utilize the Mysidopsis bahia (Mysid shrimp) acute static renewal 48-hour definitive toxicity test using EPA/600/4-90/027F.
- b) Menidia beryllina (Inland Silverside minnow) acute static renewal 48-hour definitive toxicity test using EPA/600/4-90/027F.
- c) When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the low-flow effluent concentration (critical dilution), the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effluent Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency

stated in Part I.B.9.b of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

- d) This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- e) The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA/600/4-90/027F, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part II.C.3 of this permit. The permittee shall submit full reports only upon the specific request of the Agency.
- f) In accordance with Part II.D.4 of this permit, the permittee shall report on the DMR for the reporting period the lowest Whole Effluent Lethality values determined for either species for the 30-Day Average Minimum and 48-Hour Minimum under Parameter No. 22414, and the permittee shall report the results of the valid toxicity test as follows:

1. MENIDIA BERYLLINA (INLAND SILVERSIDE MINNOW)

- A) If the Inland Silverside minnow No Observed Effect Concentration

(NOEC) for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TEM6B on the Discharge Monitoring Report.

- B) Report the Inland Silverside minnow NOEC value for survival, Parameter No. TOM6B on the Discharge Monitoring Report.

2. MYSIDOPSIS BAHIA (MYSID SHRIMP)

- A) If the Mysid shrimp NOEC for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TEM3E on the Discharge Monitoring Report.
- B) Report the Mysid shrimp NOEC value for survival, Parameter No. TOM3E on the Discharge Monitoring Report.

4. Radionuclide Test

The approved test methods for monitoring produced water for radionuclides are:

Radium 226: Method Number 7500-Ra C, Standard Methods for the Examination of Water and Wastewater, Eighteenth Edition, APHA, AWWA, and WPCF.

Radium 228: Method Number 7500-Ra D, Standard Methods for the Examination

of Water and Wastewater, Eighteenth Edition, APHA, AWWA, and WPCF.

PART II. STANDARD CONDITIONS FOR NPDES PERMITS

Section A. General Conditions

1. Introduction

In accordance with the provisions of 40 CFR Part 122.41, *et. seq.*, this permit incorporates by reference ALL conditions and requirements applicable to NPDES permits set forth in the Clean Water Act, as amended, (herein-after known as the "Act") as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action or for requiring a permittee to apply and obtain an individual NPDES permit.

3. Toxic Pollutants

- a. Notwithstanding Part II.A.5, if any toxic effluent standard or prohibition (including

any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

- b. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. Permit Flexibility

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and

reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the permit may subject the permittee to criminal enforcement pursuant to 18 U.S.C. section 1001.

9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State Law or regulation under authority preserved by section 510 of the Act.

11. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Section B. Proper Operation and Maintenance

1. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are

installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

- a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.B.4.b and 4.c.

b. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part II.D.7.

c. Prohibition of Bypass

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Part II.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part II.B.4.c(1).

5. Upset Conditions

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part II.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required by Part II.D.7; and,
 - (4) The permittee complied with any remedial measures required by Part II.B.2.
- c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. Any substance specifically listed within this permit may be discharged in accordance with specified conditions, terms, or limitations.

Section C. Monitoring and Records

1. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
- and

- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

The operator shall maintain records at development and production facilities for 3 years, wherever practicable and at a specific shore-based site whenever not practicable. The operator is responsible for maintaining records at exploratory facilities while they are discharging under the operators control and at a specific shore-based site for the remainder of the 3-year retention

period.

4. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) and time(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

5. Monitoring Procedures

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved

by the Director.

- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Section D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,
- (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and to incorporate such requirements as may be necessary under the Act.

4. Discharge Monitoring Reports and Other Reports

The operator of each lease block shall be responsible for submitting monitoring results for all facilities within each lease block. The monitoring results for the facilities (platform, drilling ship, or semisubmersible) within the particular lease block shall be summarized on the annual Discharge Monitoring Report for that lease block.

Monitoring results obtained during the previous 12 months shall be summarized and reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). In addition, the highest monthly average for all activity within each lease block shall be reported. The highest daily maximum sample taken during the reporting period shall be reported as the daily maximum concentration.

If any category of waste (discharge) is not applicable for all facilities within the lease block, due to the type of operations (e.g., drilling, production) no reporting is required; however, "no discharge" must be recorded for those categories on the DMR. If all facilities within a lease block have had no activity during the reporting period then "no activity" must be written on the DMR. Operators may list a summary of all lease blocks where there is no activity on one DMR. All pages of the DMR must be signed and certified as required by Part II.D.11 and returned when due.

5. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified.

7. One Hour and Twenty-Four Hour Reporting

- a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 1 hour from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. As required by LAC33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the DEQ hotline by telephone at (504) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the

exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health, safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.)

Notification required by this section will be made regardless of the amount of discharge. The report shall contain the following information:

- (1) A description of the noncompliance and its cause;
- (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Any upset which exceeds any effluent limitation in the permit; and,

(3) Any discharge containing a pollutant in a quantity which exceeds any reportable quantity specified in the “Notification Regulations and Procedures for Unauthorized Discharges”, LAC 33: I. Subchapter E), unless specifically authorized in this permit.

- c. The Director may waive the written report on a case-by-case basis if the oral report has been received within the time constraints stipulated by Part II.D.7.a and b.

8. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts II.D.4 and D.7 at the time monitoring reports are submitted. The reports shall contain the information listed at Part II.D.7.

9. Other Information

Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, he shall promptly submit such facts or information.

10. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified.

- a. All permit applications shall be signed as follows:
 - (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
 - (b) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - (3) For a municipality, State, Federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this election, a principal executive officer of a Federal agency includes:

- (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described above;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
 - (3) The written authorization is submitted to the Director.
- c. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports

Except for applications, effluent data, permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

Section E. Penalties for Violations of Permit Conditions

1. Criminal

a. Negligent Violations

The Act provides that any person who negligently violates permit conditions implementing section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b. Knowing Violations

The Act provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318 or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. Knowing Endangerment

The Act provides that any person who knowingly violates permit conditions implementing sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

d. False Statements

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000, or

by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See section 309.c.4 of the Clean Water Act)

2. Civil Penalties

The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation.

3. Administrative Penalties

The Act provides that any person who violates a permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. Class I Penalty

Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.

b. Class II penalty

Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.

Section F. Additional General Permit Conditions

1. When the Director May Require Application for an Individual NPDES Permit.

The Director may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:

- (a) The discharge(s) is a significant contributor of pollution;
- (b) The discharger is not in compliance with the conditions of this permit;
- (c) A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point sources;
- (d) Effluent limitations guidelines are promulgated for point sources covered by this permit;
- (e) A Water Quality Management Plan containing requirements applicable to such point source is approved;

(f) The point source(s) covered by this permit no longer:

- (1) Involve the same or substantially similar types of operations;
- (2) Discharge the same types of wastes;
- (3) Require the same effluent limitations or operating conditions;
- (4) Require the same or similar monitoring; and
- (5) In the opinion of the Director, are more appropriately controlled under an individual permit than under a general permit.

(g) The bioaccumulation monitoring results show concentrations of the listed pollutants in excess of levels safe for human consumption.

The Director may require any operator authorized by this permit to apply for an individual NPDES permit only if the operator has been notified in writing that a permit application is required.

2. When an Individual NPDES Permit may be Requested

- (a) Any operator authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit.
- (b) When an individual NPDES permit is issued to an operator otherwise subject to this general permit, the applicability of this permit to the owner or operator is automatically terminated on the effective date of this individual permit.

- (c) A source excluded from coverage under this general permit solely because it already has an individual permit may request that its individual permit be revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source.

3. Permit Reopener Clause

If applicable new or revised effluent limitations guidelines or New Source Performance Standards covering the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR 435) are promulgated in accordance with sections 301(b), 304(b)(2), and 307(a)(2), and the new or revised effluent limitations guidelines or New Source Performance Standards are more stringent than any effluent limitations in this permit or control a pollutant not limited in this permit, the permit may, at the Director's discretion, be modified to conform to the new or revised effluent limitations guidelines.

Notwithstanding the above, if an offshore oil and gas extraction point source discharge facility is subject to the ten year protection period for new source performance standards under the Clean Water Act section 306(d), this reopener clause may not be used to modify the permit to conform to more stringent new source performance standards or technology based standards developed under section 301(b)(2) during the ten year period specified in 40 CFR Part 122.29(d).

The Director may modify this permit upon meeting the conditions set forth in this reopener

clause.

Section G. Definitions

All definitions contained in section 502 of the Act shall apply to this permit and are incorporated herein by references. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. "Act" means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.
2. "Administrator" means the Administrator of the U.S. Environmental Protection Agency.
3. "Annual Average" means the average of all discharges sampled and/or measured during a calendar year in which daily discharges are sampled and/or measured, divided by the number of discharges sampled and/or measured during such year.
4. "Applicable effluent standards and limitations" means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
5. "Applicable water quality standards" means all water quality standards to which a

discharge is subject under the Act.

6. "Areas of Biological Concern" means a portion of the territorial seas identified by EPA, in consultation with the Department of Interior as containing potentially productive or unique biological communities or as being potentially sensitive to discharges associated with oil and gas activities.
7. "Blow-Out Preventer Control Fluid" means fluid used to actuate the hydraulic equipment on the blow-out preventer or subsea production wellhead assembly.
8. "Boiler Blowdown" means discharges from boilers necessary to minimize solids build-up in the boilers, including vents from boilers and other heating systems.
9. "Bulk Discharge" any discharge of a discrete volume or mass of effluent from a pit tank or similar container that occurs on a one-time, infrequent or irregular basis.
10. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
11. "Completion Fluids" means salt solutions, weighted brines, polymers and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production. These fluids move into the formation

and return to the surface as a slug with the produced water. Drilling muds remaining in the wellbore during logging, casing, and cementing operations or during temporary abandonment of the well are not considered completion fluids and are regulated by drilling fluids requirements.

12. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.
13. "Daily Average" (also known as monthly average) discharge limitations means the highest allowable average of daily discharge(s) over a calendar month, calculated as the sum of all daily discharge(s) measured during a calendar month divided by the number of daily discharge(s) measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily

average concentration means the arithmetic average (weighted by flow) of all daily discharge(s) of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

14. "Daily Maximum" discharge limitations means the highest allowable "daily discharge" during the calendar month.
15. "Desalinization Unit Discharge" means wastewater associated with the process of creating freshwater from seawater.
16. "Deck Drainage" means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities covered under this permit.
17. "Development Drilling" means the drilling of wells required to efficiently produce a hydrocarbon formation or formations.
18. "Development Facility" means any fixed or mobile structure that is engaged in the drilling of productive wells.

19. "Diatomaceous Earth Filter Media" means filter media used to filter seawater or other authorized completion fluids and subsequently washed from the filter.
20. "Diesel Oil" means the grade of distillate fuel oil, as specified in the American Society for Testing and Materials Standard Specification D975-81, that is typically used as the continuous phase in conventional oil-based drilling fluids.
21. "Director" means the State Director or an authorized representative.
22. "Domestic Waste" means material discharged from galleys, sinks, showers and baths, safety showers, eye wash stations, hand washing stations, fish cleaning stations, and laundries. Domestic Waste does not include drainage from toilets, urinals, hospitals, and cargo spaces.
23. "Drill Cuttings" means particles generated by drilling into the subsurface geological formations including cured cement carried to the surface with the drilling fluid.
24. "Drilling Fluids" means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. A water-based drilling fluid is the conventional drilling mud in which water is the continuous phase and the suspending medium for solids, whether or not oil is present. An oil based drilling fluids has diesel oil, mineral oil, or some other oil as its continuous

phase with water as the dispersed phase.

25. "Environmental Protection Agency" (EPA) means the U.S. Environmental Protection Agency.
26. "Excess Cement Slurry" means the excess mixed cement, including additives and wastes from equipment wash down, after a cementing operation.
27. "Exploratory Facility" means any fixed or mobile structure that is engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs.
28. "Fecal Coliform Bacteria Sample" consists of one effluent grab portion collected during a 24-hour period at peak loads.
29. "Grab sample" means an individual sample collected in less than 15 minutes.
30. "Garbage" means all kinds of food waste, wastes generated in living areas on the facility, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the facility and liable to be disposed of continuously or periodically, except domestic waste water such as dishwater, and those substances that are defined or listed in other Annexes to MARPOL 73/78

31. "Inverse Emulsion Drilling Fluids" means an oil-based drilling fluid which also contains a large amount of water.
32. "Live bottom areas" means those areas which contain biological assemblages consisting of such sessile invertebrates as seas fans, sea whips, hydroids, anemones, ascideians sponges, bryozoans, seagrasses, or corals living upon and attached to naturally occurring hard or rocky formations with fishes and other fauna.
33. "Maintenance waste" means materials collected while maintaining and operating the facility, including, but not limited to, soot, machinery deposits, scraped paint, deck sweepings, wiping wastes, and rags.
34. "Muds, Cuttings, and Cement at the Sea floor" means discharges that occur at the sea floor prior to installation of the marine riser and during marine riser disconnect, well abandonment and plugging operations.
35. "National Pollutant Discharge Elimination System" (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under section 307, 318, 402, and 405 of the Act.
36. "New Source" means any facility or activity that meets the definition of "new source"

under 40 CFR 122.2 and meets the criteria for determination of new sources under 40 CFR 122.29(b) applied consistently with all of the following definitions:

(a) The term "water area" as used in the term "site" in 40 CFR 122.29 and 122.2 shall mean the water area and ocean floor beneath any exploratory, development, or production facility where such facility is conducting its exploratory, development, or production activities.

(b) The term "significant site preparation work" as used in 40 CFR 122.29 shall mean the process of surveying, clearing, or preparing an area of the ocean floor for the purpose of constructing or placing a development or production facility on or over the site.

- 37. "Operational waste" means all cargo associated waste, maintenance waste, cargo residues, and ashes and clinkers from incinerators and coal burning boilers.
- 38. "Packer Fluid" means low solids fluids between the packer, production string and well casing. They are considered to be workover fluids.
- 39. "Priority Pollutants" means those chemicals or elements identified by EPA, pursuant to section 307 of the Clean Water Act and 40 CFR 401.15.

40. "Produced Sand" means slurried particles used in hydraulic fracturing, the accumulated formation sands, and scale particles generated during production. Produced sand also includes desander discharge from produced water waste stream and blowdown of water phase from the produced water treating system.
41. "Produced Water" means the water (brine) brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.
42. "Production Facility" means any fixed or mobile structure that is either engaged in well completion or used for active recovery of hydrocarbons from producing formations.
43. "Sanitary Waste" means human body waste discharged from toilets and urinals.
44. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
45. "Sheen" means a silvery or metallic sheen, gloss, or increased reflectivity, visual color

or iridescence on the water surface.

- 46. "Source Water and Sand" means water from non-hydrocarbon bearing formations for the purpose of pressure maintenance or secondary recovery including the entrained solids.
- 47. "Spotting" means the process of adding a lubricant (spot) downhole to free stuck pipe.
- 48. "Territorial Seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.
- 49. "Trace Amounts" means that if materials added downhole as well treatment, completion, or workover fluids do not contain priority pollutants then the discharge is assumed not to contain priority pollutants, except possibly in trace amounts.
- 50. "Uncontaminated Ballast/Bilge Water" means seawater added or removed to maintain proper draft.
- 51. "Uncontaminated Freshwater" means freshwater which is discharged without the

addition of chemicals; included are (1) discharges of excess freshwater that permit the continuous operation of fire control and utility lift pumps, (2) excess freshwater from pressure maintenance and secondary recovery projects, (3) water released during training and testing of personnel in fire protection, and (4) water used to pressure test new piping.

52. "Uncontaminated Seawater" means seawater which is returned to the sea without the addition of chemicals. Included are (1) discharges of excess seawater which permit the continuous operation of fire control and utility lift pumps (2) excess seawater from pressure maintenance and secondary recovery projects (3) water released during the training and testing of personnel in fire protection (4) seawater used to pressure test new piping, and (5) once through noncontact cooling water which has not been treated with biocides.
53. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
54. "Weekly Average" means the highest allowable average of daily discharge(s) over a

calendar week, calculated as the sum of all daily discharge(s) measured during a calendar week divided by the number of daily discharge(s) measured during that week. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all daily discharge(s) of concentration determined during the calendar week where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

55. "Well Treatment Fluids" mean any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled. These fluids move into the formation and return to the surface as a slug with the produced water. Stimulation fluids include substances such as acids, solvents, and propping agents.
56. "Workover Fluids" mean salt solutions, weighted brines, polymers, and other specialty additives used in a producing well to allow safe repair and maintenance or abandonment procedures. High solids drilling fluids used during work over operations are not considered work over fluids by definition and therefore discharge is prohibited. Packer fluids, low solids fluids between the packer, production string and well casing, are considered to be workover fluids and must meet only the effluent requirements imposed on workover fluids.
57. The term "MGD" shall mean million gallons per day.
58. The term "mg/l" shall mean milligrams per liter or parts per million (ppm).
59. The term "ug/l" shall mean micrograms per liter or parts per billion (ppb).

Appendix A

Table 1-A Produced Water Critical Dilution (Percent Effluent) Depth Difference Between the Discharge Pipe and the Sea floor 2 Meters and Less

Pipe Diameter (Inches)							
Discharge Rate (bbl/day)	>0" to 5"	≥ 5" to 7"	≥ 7" to 9"	≥ 9" to 11"	≥ 11" to 15"	≥ 15"	
≤ 500	0.26	0.26	0.26	0.11	0.1	0.09	1
501 to 1,000	0.66	0.66	0.66	0.66	0.66	0.66	*
1,001 to 2,000	1.44	1.44	1.44	1.44	1.44	1.44	*
2,001 to 3,000	2.63	2.2	2.2	2.2	2.2	2.2	*
3,001 to 4,000	4.2	3.0	3.0	3.0	3.0	3.0	*
4,001 to 5,000	5.6	3.6	3.6	3.6	3.6	3.6	*
5,001 to 7,500	7.6	6.4	5.3	5.3	5.3	5.3	*
7,501 to 10,000	8.8	9.4	6.8	6.8	6.8	6.8	*
10,001 to 15,000	10.5	12.25	10.8	9.1	9.1	9.1	*
15,001 to 20,000	11.5	13.6	14.8	10.9	10.9	10.1	*
20,001 to 35,000	13.0	15.6	17.4	18.7	15.4	14.4	*
35,001 to 50,000	13.7	16.5	18.5	20.0	21.1	16.6	*
50,001 to 75,000	16.7	17.3	19.5	21.0	22.25	19.0	*

bbl/day means barrels per day

Table 1-B Produced Water Critical Dilution (Percent Effluent) Depth Difference Between the Discharge Pipe and the Sea floor Greater than 2 Meters to 4 Meters

+)))))))))) 0))),							
* * Pipe Diameter (Inches) *							
* Discharge Rate	/))1						
(bbl/day)	* >0" to	* ≥ 5"	* ≥ 7"	* ≥ 9"	* ≥ 11"	* ≥ 15"	*
	* 5"	* to 7"	* to 9"	* to 11"	* to 15"		*
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* ≤ 500	* 0.1	* 0.1	* 0.1	* 0.1	* 0.1	* 0.1	*
* * * *							
* 501 to 1,000	* 0.2	* 0.2	* 0.2	* 0.2	* 0.2	* 0.2	*
* * * *							
* 1,001 to 2,000	* 0.36	* 0.36	* 0.36	* 0.36	* 0.36	* 0.36	*
* * * *							
* 2,001 to 3,000	* 0.74	* 0.65	* 0.65	* 0.65	* 0.65	* 0.65	*
* * * *							
* 3,001 to 4,000	* 1.1	* 0.86	* 0.86	* 0.86	* 0.86	* 0.86	*
* * * *							
* 4,001 to 5,000	* 1.55	* 1.05	* 1.05	* 1.05	* 1.05	* 1.05	*
* * * *							
* 5,001 to 7,500	* 3.0	* 1.74	* 1.5	* 1.5	* 1.5	* 1.5	*
* * * *							
* 7,501 to 10,000	* 4.6	* 2.6	* 2.0	* 2.0	* 2.0	* 2.0	*
* * * *							
* 10,001 to 15,000	* 5.8	* 4.9	* 3.2	* 2.8	* 2.8	* 2.8	*
* * * *							
* 15,001 to 20,000	* 6.2	* 7.6	* 5.0	* 3.6	* 3.5	* 3.5	*
* * * *							
* 20,001 to 35,000	* 6.7	* 8.8	* 9.8	* 7.5	* 5.9	* 5.6	*
* * * *							
* 35,001 to 50,000	* 7.0	* 9.2	* 11.0	* 11.2	* 8.9	* 6.9	*
* * * *							
* 50,001 to 75,000	* 7.15	* 9.5	* 11.4	* 13.0	* 13.5	* 8.5	*
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bbl/day means barrels per day

Table 1-C Produced Water Critical Dilution (Percent Effluent) Depth Difference Between the Discharge Pipe and the Sea floor Greater than 4 Meters to 6 Meters

Discharge Rate (bbl/day)		Pipe Diameter (Inches)					
		>0" to 5"	≥ 5" to 7"	≥ 7" to 9"	≥ 9" to 11"	≥ 11" to 15"	≥15"
≤ 500		0.04	0.04	0.04	0.04	0.04	0.04
501 to 1,000		0.09	0.09	0.09	0.09	0.09	0.09
1,001 to 2,000		0.17	0.17	0.17	0.17	0.17	0.17
2,001 to 3,000		0.26	0.24	0.24	0.24	0.24	0.24
3,001 to 4,000		0.37	0.31	0.31	0.31	0.31	0.31
4,001 to 5,000		0.6	0.5	0.5	0.5	0.5	0.5
5,001 to 7,500		1.14	0.8	0.7	0.7	0.7	0.7
7,501 to 10,000		1.8	1.1	0.9	0.9	0.9	0.9
10,001 to 15,000		3.5	2.0	1.4	1.3	1.3	1.3
15,001 to 20,000		4.3	3.1	2.1	1.7	1.7	1.7
20,001 to 35,000		4.6	6.2	4.8	3.6	2.8	2.7
35,001 to 50,000		4.8	6.5	7.2	5.7	4.6	3.6
50,001 to 75,000		4.9	6.6	8.2	8.8	7.3	4.8

bbl/day means barrels per day

Table 1-D Produced Water Critical Dilution (Percent Effluent) Depth Difference Between the Discharge Pipe and the Sea floor Greater than 6 Meters to 9 Meters

		Pipe Diameter (Inches)						
Discharge Rate (bbl/day)	>0" to 5"	≥ 5" to 7"	≥ 7" to 9"	≥ 9" to 11"	≥ 11" to 15"	≥ 15"		
≤ 500	0.04	0.04	0.04	0.04	0.04	0.04	1	
501 to 1,000	0.06	0.06	0.06	0.06	0.06	0.06		
1,001 to 2,000	0.1	0.1	0.1	0.1	0.1	0.1		
2,001 to 3,000	0.15	0.14	0.14	0.14	0.14	0.14		
3,001 to 4,000	0.21	0.18	0.18	0.18	0.18	0.18		
4,001 to 5,000	0.27	0.22	0.22	0.22	0.22	0.22		
5,001 to 7,500	0.6	0.43	0.41	0.41	0.41	0.41		
7,501 to 10,000	0.9	0.62	0.53	0.53	0.53	0.55		
10,001 to 15,000	1.8	1.1	0.83	0.76	0.76	0.76		
15,001 to 20,000	2.8	1.6	1.2	1.0	1.0	1.0		
20,001 to 35,000	3.6	3.7	2.6	2.0	1.7	1.6		
35,001 to 50,000	3.7	5.0	4.3	3.3	2.6	2.2		
50,001 to 75,000	3.7	5.1	6.4	5.4	4.4	3.1		

bbl/day means barrels per day

Table 1-E Produced Water Critical Dilution (Percent Effluent) Depth Difference Between the Discharge Pipe and the Sea floor Greater than 9 Meters

		Pipe Diameter (Inches)						
Discharge Rate (bbl/day)	>0" to 5"	≥ 5" to 7"	≥ 7" to 9"	≥ 9" to 11"	≥ 11" to 15"	≥ 15"		
≤ 500	0.04	0.04	0.04	0.04	0.04	0.04	1	
501 to 1,000	0.06	0.06	0.06	0.06	0.06	0.06		
1,001 to 2,000	0.09	0.09	0.09	0.09	0.09	0.09		
2,001 to 3,000	0.11	0.1	0.1	0.1	0.1	0.1		
3,001 to 4,000	0.13	0.12	0.12	0.12	0.12	0.12		
4,001 to 5,000	0.15	0.13	0.13	0.13	0.13	0.13		
5,001 to 7,500	0.22	0.18	0.18	0.18	0.18	0.18		
7,501 to 10,000	0.42	0.32	0.3	0.3	0.3	0.3		
10,001 to 15,000	0.8	0.53	0.44	0.42	0.42	0.42		
15,001 to 20,000	1.3	0.8	0.62	0.54	0.54	0.54		
20,001 to 35,000	2.7	1.8	1.3	1.0	0.9	0.9		
35,001 to 50,000	2.7	3.0	2.2	1.7	1.4	1.2		
50,001 to 75,000	2.8	3.9	3.7	3.0	2.4	1.7		

bbl/day means barrels per day

Table 2

Minimum Vertical Port Separation Distance
to Avoid Interference

<u>Port Flow Rate (bbl/day)</u>	<u>Minimum Separation Distance (m)</u>
0 - 500	2.2
501 - 1000	2.7
1001 - 2000	4.7
2001 - 5000	4.8
5001 and Greater	6.6

**Table 3: Critical Dilutions (Percent Effluent)
for Toxicity Limitations for
Seawater and Freshwater to which treatment chemicals have been added**

+))))))))))))0))))))))))))0))))))))))))))))))))))))),							
*	*	Pipe Diameter					*
* Depth		* Discharge Rate		/))))))))))))))))))))))))1			
* Difference**		* (bbl/day)		* > 0" > 2" > 4" > 6" *			
* (Meters)		*		* to 2" to 4" to 6"			*
/))))))))))))3))))))))))))3))))))))))))))))))))))))1							
* 0 to 3		* 0 to 1,000		* 11.4 5.1 5.1 6.3 *			
*		*		*			*
*		* 1,001 to 10,000		* 38 53 62 67 *			
*		*		*			*
*		* Greater than 10,000		* 49 66 74 77 *			
*		*		*			*
/))))))))))))3))))))))))))3))))))))))))))))))))))))1							
*		*		*			*
* > 3 to 5		* 0 to 1,000		* 4.0 4.8 6.6 6.2 *			
*		*		*			*
*		* 1,001 to 10,000		* 16.1 25 30 23 *			
*		*		*			*
*		* Greater than 10,000		* 23.6 33.3 39 49 *			
/))))))))))))3))))))))))))3))))))))))))))))))))))))1							
*		*		*			*
* > 5 to 7		* 0 to 1,000		* 4.0 4.8 5.6 6.2 *			
*		*		*			*
*		* 1,001 to 10,000		* 12.8 21 18.1 18.8 *			
*		*		*			*
*		* Greater than 10,000		* 16.7 25.4 31.2 34.4 *			
*		*		*			*
/))))))))))))3))))))))))))3))))))))))))))))))))))))1							
*		*		*			*
* Greater than 7		* 0 to 1,000		* 4.0 4.8 5.6 6.2 *			
*		*		*			*
*		* 1,001 to 10,000		* 9.8 16.3 18.1 18.8 *			
*		*		*			*
*		* Greater than 10,000		* 12.4 18.8 25.2 26.3 *			
*		*		*			*
.))))))))))))2))))))))))))2))))))))))))))))))))-)							

Depth Difference means the distance in water depth between the discharge pipe and the seafloor

Table 3. Effluent Limitations, Prohibitions and Monitoring Requirements

Discharge	Regulated & Monitored Discharged Parameter	Discharge Limitation/Prohibition	Monitoring Requirement		
			Measurement Frequency	Sample Type/Method	Recorded Value(s)
Drilling Fluid		No Discharge			
Drill Cuttings		No Discharge			
Deck Drainage.....	Free Oil.....	No free oil.....	Once/day(*2)..... ..	Visual sheen.....	Number of days sheen observed
Produced Water.....	Oil and grease.....	42 mg/l daily max., 29 mg/l monthly average	Once/month..... ..	Grab(*3).....	Daily max., monthly average
	Toxicity..... ..	7-day average min. NOEC(*10) and monthly average min. NOEC(*10)	Dilution Dependent(*9)	Grab.....	Lowest NOEC for either of the two species
	Benzene, Lead, Total Phenols, and Thallium	See Part I.B.3.a	Dilution Dependent(*9)	Grab.....	Daily max., monthly average
	Radium 226 and 228....	Monitor..... ..	Dilution Dependent(*9)	Estimate.....	pCi/liter
	Flow (MGD).....	Monitor..... ..	Once/month..... ..		Monthly Average
Produced Sand.....		No Discharge			
Well treatment fluids(*4) completion fluids(*4), and workover fluids(*4) (includes packer fluids)	Free oil.....	No free oil.....	Once/day(*1)..... ..	Static sheen	Number of days sheen observed
	Oil & Grease.....	42 mg/l daily max., 29 mg/l monthly avg.	Once/month..... ..	Grab(*3).....	Daily max., monthly average
Sanitary waste.....	Residual chlorine....	1 mg/l (minimum).....	Once/month..... ..	Grab.....	Concentration
	Solids..... ..	No Floating Solids	Once/day..... ..	Observation (*8).....	Number of days solids observed
	BOD5 (*6).....	45 mg/l..... 45	once/six months.....	Grab..... Grab.....	Concentration Concentration

TSS	mg/l.....	once/six
(*6).....		months.....

Domestic
waste.....

Solids.....
..

No floating solids
or foam

Once/day.....
..

Observation (*8).....	Number of days
	observed

Table 3. (Continued)

Discharge	Regulated & Monitored Discharged Parameter	Discharge Limitation/ Prohibition	Monitoring Requirement		
			Measurement Frequency	Sample Type/Method	Recorded Value(s)
Miscellaneous discharges: Desalinization unit discharge; blowout pre-venter fluid; uncontaminated ballast water; uncontaminated bilge water; uncontaminated freshwater; mud, cuttings and cement at sea floor; uncontaminated seawater; boiler blowdown; source water and sand; diatomaceous earth filter media; excess cement slurry	Free oil.....	No free oil.....	Once/week(*5)..... ..	Visual sheen.....	Number of days sheen observed
Miscellaneous discharges of seawater and freshwater to which treatment chemicals have been added: excess seawater which permits the continuous operation of fire control and utility lift pumps, excess seawater from pressure maintenance and secondary recovery projects, water released during training of personnel in fire protection, seawater used to pressure test new piping and new pipelines, ballast water, once-through non-contact cooling water, desalinization unit discharge	Treatment chemicals... Free oil..... Toxicity..... ..	Most stringent of: EPA label registration, maximum manufacturers recommended dose, or 500 mg/l. No free oil..... 48-hour average min. NOEC and monthly avg minimum NOEC (*12)	1/week..... .. Rate Dependent(*11)...	visible sheen..... Grab.....	Number of days sheen observed Lowest NOEC observed for either of the two species

Footnotes

- *1 When discharging.
- *2 When discharging and facility is manned. Monitoring shall be accomplished during times when observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge.
- *3 May be based on a single grab sample or the arithmetic average of four grab sample results collected in the 24 hr. period.
- *4 No discharge of priority pollutants except in trace amounts. Information on the specific chemical composition shall be recorded but not reported unless requested by EPA.
- *5 When discharging for cement at the seafloor and blowout preventer fluid. All other miscellaneous discharges: when discharging, discharge is authorized only during times when visual sheen observation is possible, unless the static sheen method is used. Uncontaminated seawater uncontaminated freshwater, source water and source sand, uncontaminated bilge water, and uncontaminated ballast water from platforms on automatic purge systems may be discharged without monitoring from platforms which are not manned.
- *6 BOD5 and TSS limits only apply to discharges less than 2,500 gallons per day.
- *7 Hach method CN-66 DPD approved. Minimum of 1 mg/l and maintained as close to this concentration as possible.
- *8 Monitoring shall be accomplished during daylight by visual observation of the surface of the receiving water in the vicinity of sanitary and domestic waste outfalls. Observations shall be made following either the morning or midday meals at a time of maximum estimated discharge.
- *9 See Part I, section B.3.c. of this permit.
- *10 See Table 1, Appendix A.
- *11 Once/year for discharges from 0 bbl/day to 499 bbl/day, once/quarter for discharges from 500 bbl/day to 4,599 bbl/day, and once/month for discharges of 4,600 bbl/day and greater.
- *12 See Table 3, Appendix A.